## EMA Gassie

## **Driveshafts & Engine Conversions**

Email flows into my computer at an alarming rate. I had subscribed to Traction, 2CV and D-series email groups. The 2CV and D-series emails were amazingly dumb as are some of the traction ones, however, once in a while there is some interesting banter between Citroen enthusiasts. This is an example of one such banter. Editor

From: Tom Molumby Reply-To: TA-L@egroups.com To: TA-L@egroups.com

I am in the process of totally restoring a 1954 11B and I need some information from my fellow list members.

1. Who sells the CV conversion driveshafts. Is their an advantage to keeping the tapered axle or going to the splined one?

2. Does anyone have the wiring diagram for this particular model?

3. I would like to upgrade the engine and/or transmission. Does anyone know who might have an ID or DS engine with or without the transmission I am right in the middle of the US and would like to find something within 500 miles of here because of the excessive cost of shipping

4. If I decide to keep the original engine is there a simple way to increase power? I would like to replace the cam and replace the connecting rods and go to rods with insert bearings. Can

this be done and is it worth it? 5. I understand the original transmission is very weak. Is there a way to strengthen it and if so who sells the

necessary parts?

I am in the process of removing the fenders, lights and trim. In the next few weeks I am going to place the body on a large rotisserie so it can be media blasted to remove the paint and undercoating. My wife objected to the car when I drove it home last year but now can't wait to drive it.

Tom.

Perhaps I can address some of your issues

1 & 5) One source of improved driveshafts is Roger Williams in the UK, and his web site is at

http://www.steam-car-dev.karoo.net/ In addition to driveshafts, he has a few improvements for traction gearboxes. My 1956 Legere has his custom 10/31 ring & pinion in it, replacing the usual 9/31, which raises the cruising speed

He also provides a re-inforcing system for the boxes. I know someone in the SF bay area whose Normale has Roger's drive shafts and he is VERY happy with the improved turning circle and overall performance.

4) Look at the head on your engine and see if it has 11.D embossed on one side (The plug side if I remember correctly). If so, you have the Late Traction engine with easily replaced shell bearings and the best power output of the

For me, having the higher gear ratio and lower engine rpm at highway cruising speeds is more important than getting more power, so I have no plans on ever installing an ID engine/gearbox, even though the thought of having more power and 4 properly spaced forward gears is attractive.

For me the gain is not worth the effort, but for others it can make good sense, so it is a very personal decision.

David Russel

N. California

4th owner of a white '56 Legere with a bit over 100K kms

I can add to the answers you already got, the following from my own experi-

I have owned up to a year ago, a 11BL from 1950, which I converted with a DS engine and 4 speed gearbox. If you want to do the same be sure that you use the DS engine with bore x stroke of 78 x 100 (pre'67), and not the later, square one's. The later model has a gearbox that will hardly fit within the cradle at the front of your car. I have used standard driveshafts with this car. Never had any problem with them. I drove the car about 25,000 km

For the original Traction engine you still can buy a special inlet manifold that will use 2 carburettors instead of one. If this also increases the power and not only the fuel consumption is beyond my knowledge. But it was a popular modification in its day.

before I sold it, including trips to the

French mountains.

When installing the 4 speed box, you need to make some major modifications in order to be able to shift all the gears!

If you also use the DS engine the carburettor is on the opposite side compared to the TA, making the modifications even more compex. In France you can buy a kit that includes everything you need to use the 4 speed DS gearbox, but it is all but cheap. Changing the connection rods is easy if you use the long stroke DS engine ones. They are sold here in The Netherlands for approx. \$50/piece. It will make overhauling the engine somewhat cheaper, as a main advantage. Good luck.

Wiljan

